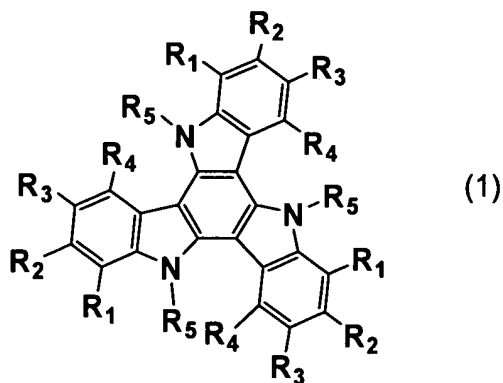


IN THE CLAIMS:

1.~~{1}~~ (Currently amended) A substituted Sym-triindole deriva-  
tive represented by the following general formula (1):

~~{formula 1}~~

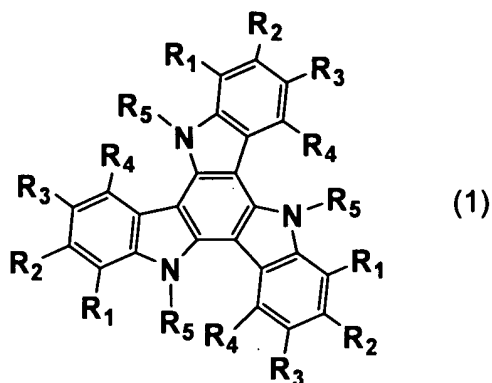


5    {wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are each independently hydrogen,  
halogen, C1-C6 alkyl group, C1-C6 haloalkyl group, substi-  
tuted C1-C6 alkyl group, C2-C6 alkenyl group, substituted C2-  
C6 alkenyl group, C2-C6 alkynyl group, substituted C2-C6 al-  
kynyl group, hydroxyl group, C1-C6 alkoxy group, aryloxy  
10    group, amino group, mono-substituted amino group, di-  
substituted amino group, acylamino group, mercapto group, C1-  
C6 alkylsulfenyl group, C1-C6 haloalkylsulfenyl group, aryl-  
sulfenyl group, substituted arylsulfenyl group, C1-C6 alkyl-  
sulfinyl group, C1-C6 haloalkylsulfinyl group, aralkylsulf-  
15    enyl group, arylsulfinyl group, substituted arylsulfinyl

group, C1-C6 alkylsulfonyl group, C1-C6 haloalkylsulfonyl group, arylsulfonyl group, substituted arylsulfonyl group, sulfonic acid group (hydroxysulfonyl group), aryl group, substituted aryl group, cyano group, nitro group, formyl group, acyl group, carboxyl group, C1-C6 alkoxy carbonyl group, carbamoyl group, N-mono-substituted carbamoyl group, N,N-disubstituted carbamoyl group, hydrazonomethyl group (-CH=N-NH<sub>2</sub> group), N-mono-substituted hydrazonomethyl group, N,N-disubstituted hydrazonomethyl group, oximemethyl group (hydroxyiminomethyl group), C1-C6 alkoxyiminomethyl group, or aryloxyiminomethyl group; R<sub>5</sub> is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group, or aryl C1-C6 alkyl group; wherein, in no event, all of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are hydrogen simultaneously.

15 2. {2} (Currently amended) A process for producing a substituted Sym-triindole derivative represented by the following general formula (1):

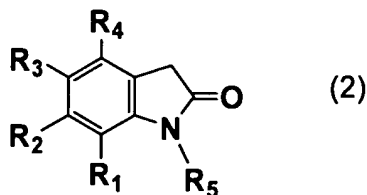
~~{formula 3}~~



wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are each independently hydrogen,  
 halogen, C1-C6 alkyl group, C1-C6 haloalkyl group, substi-  
 tuted C1-C6 alkyl group, C2-C6 alkenyl group, substituted C2-  
 C6 alkenyl group, C2-C6 alkynyl group, substituted C2-C6 al-  
 5 kynyl group, hydroxyl group, C1-C6 alkoxy group, aryloxy  
 group, amino group, mono-substituted amino group, di-  
 substituted amino group, acylamino group, mercapto group, C1-  
 C6 alkylsulfenyl group, C1-C6 haloalkylsulfenyl group, aral-  
 kylsulfenyl group, arylsulfenyl group, substituted arylsulf-  
 10 enyl group, C1-C6 alkylsulfinyl group, C1-C6 haloalkyl-  
 sulfinyl group, arylsulfinyl group, substituted arylsulfinyl  
 group, C1-C6 alkylsulfonyl group, C1-C6 haloalkylsulfonyl  
 group, arylsulfonyl group, substituted arylsulfonyl group,  
 sulfonic acid group (hydroxysulfonyl group), aryl group, sub-  
 15 stituted aryl group, cyano group, nitro group, formyl group,

acyl group, carboxyl group, C1-C6 alkoxy carbonyl group, carbamoyl group, N-mono-substituted carbamoyl group, N,N-disubstituted carbamoyl group, hydrazonomethyl group (-CH=N-NH<sub>2</sub> group), N-mono-substituted hydrazonomethyl group, N,N-disubstituted hydrazonomethyl group, oximemethyl group (hydroxyiminomethyl group), C1-C6 alkoxyiminomethyl group, or aryloxyiminomethyl group; R<sub>5</sub> is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group, or aryl C1-C6 alkyl group; wherein, in no event, all of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub> and R<sub>4</sub> are hydrogen simultaneously), which process comprises reacting a substituted oxyindole represented by the following general formula (2):

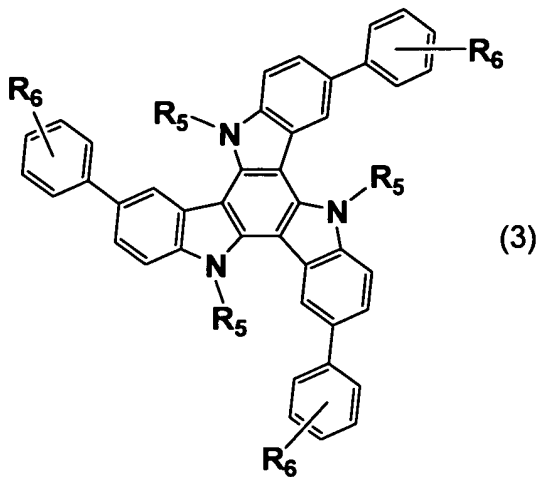
~~{formula 2}~~



~~{wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> have the same definitions as given above}~~, with a phosphorus oxyhalide.

3.~~{3}~~ (Currently amended) A Sym-triindole derivative represented by the following general formula (3):

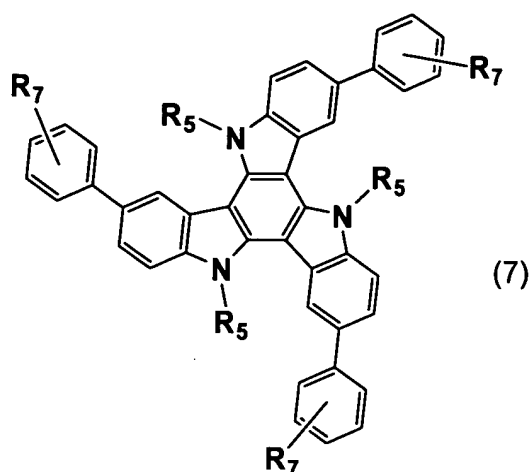
~~{formula 4}~~



~~{wherein R<sub>5</sub> is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group, or aryl C1-C6 alkyl group; and R<sub>6</sub> is hydrogen, formyl group, cyano group, C1-C6 alkoxy carbonyl group, dicyanovinyl group, aryl group or substituted aryl group}~~.

4.~~{4}~~ (Currently amended) A process for producing a Sym-triindole derivative represented by the following general formula (7):

10      ~~{formula 8}~~



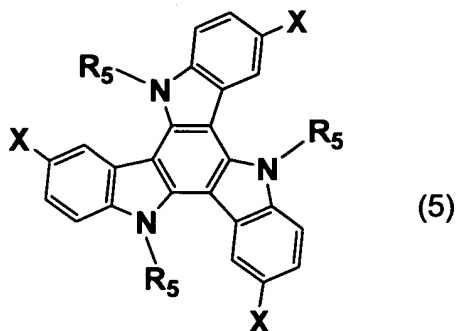
{wherein  $R_5$  is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and  $R_7$  is hydrogen, formyl group, cyano group, C1-C6 alkoxy carbonyl group, aryl group or substituted aryl group}, which  
 5 process comprises reacting an N-substituted-5-halo-oxyindole represented by the following general formula (4):

~~{formula 5}~~



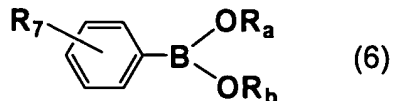
{wherein  $R_5$  has the same definition as given above; and X is halogen},  
 with a phosphorus oxyhalide to obtain an N-substituted-5-halo-triindole derivative represented by the  
 10 following general formula (5):

~~{formula 6}~~



{wherein R<sub>5</sub> and X have the same definitions as given above},  
 and ~~further~~ reacting the derivative of general formula (5) it  
 with a boric acid compound represented by the following gen-  
 eral formula (6):

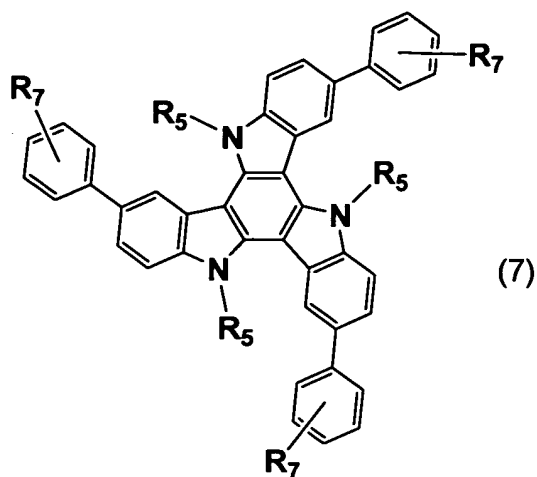
5        ~~{formula 7}~~



{wherein R<sub>7</sub> has the same definition as give above; and R<sub>a</sub> and  
 R<sub>b</sub> are each independently hydrogen atom, C1-C6 alkyl group or  
 optionally substituted phenyl group and may be combined to  
 each other to form a ring}.

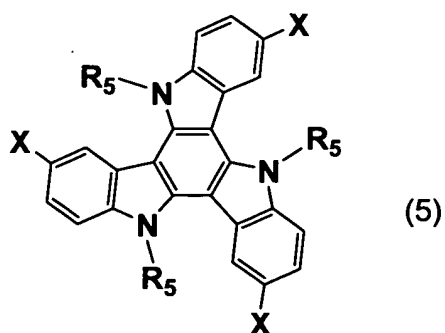
10    5.5 (Currently amended) A process for producing a Sym-  
 triindole derivative represented by the following general  
 formula (7):

~~{formula 11}~~



{wherein  $R_5$  is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and  $R_7$  is hydrogen, formyl group, cyano group, C1-C6 alkoxy carbonyl group, aryl group or substituted aryl group}, which process comprises reacting an N-substituted-5-halo-triindole derivative represented by the following general formula (5):

~~{formula 9}~~

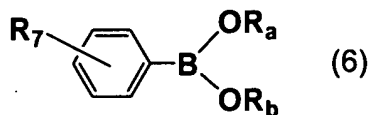


{wherein  $R_5$  has the same definition as given above; and X is halogen}, with a boric acid compound represented by the fol-



lowing general formula (6):

~~{formula 10}~~

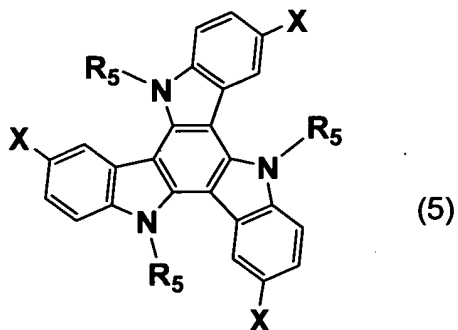


{wherein R<sub>7</sub> has the same definition as given above; and R<sub>a</sub> and R<sub>b</sub> are each independently hydrogen atom, C1-C6 alkyl group or optionally substituted phenyl group and may be combined to each other to form a ring}.

6.~~{6}~~ (Currently amended) A process for producing an N-substituted-5-halo-triindole derivative represented by the following general formula (5):

10

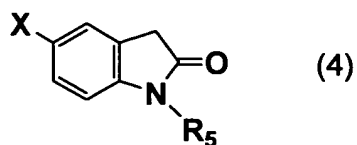
~~{formula 13}~~



{wherein R<sub>5</sub> is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and X is halogen}, which process comprises reacting an N-

substituted-5-halo-oxyindole represented by the following  
 general formula (4):

~~{formula 12}~~

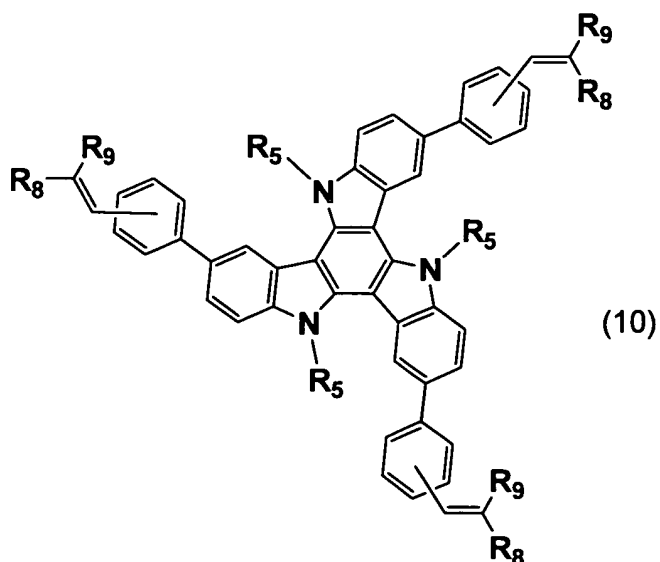


~~{wherein R<sub>5</sub> and X have the same definitions as given above},~~

5 with a phosphorus oxyhalide.

7.~~{7}~~ (Currently amended) A process for producing a Sym-  
 triindole derivative represented by the following general  
 formula (10):

~~{formula 16}~~

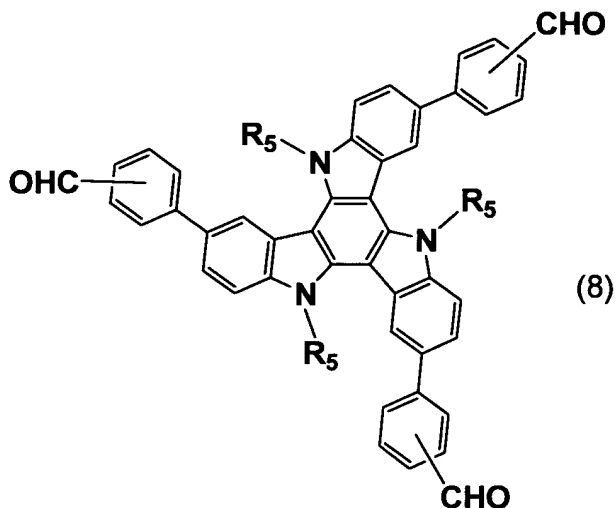


10 ~~{wherein R<sub>5</sub> is C2-C12 alkyl group, substituted C2-C12 alkyl~~

group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; R<sub>8</sub> is hydrogen or cyano group; and R<sub>9</sub> is cyano group, carboxylic acid group, C1-C6 alkoxy carbonyl group, aryloxycarbonyl group, aryl group or substituted aryl group}, which process comprises reacting a triindole derivative represented by the

5 following general formula (8):

~~{formula 14}~~



~~{wherein R<sub>5</sub> has the same definition as given above}~~, with a methylene compound represented by the general formula (9):

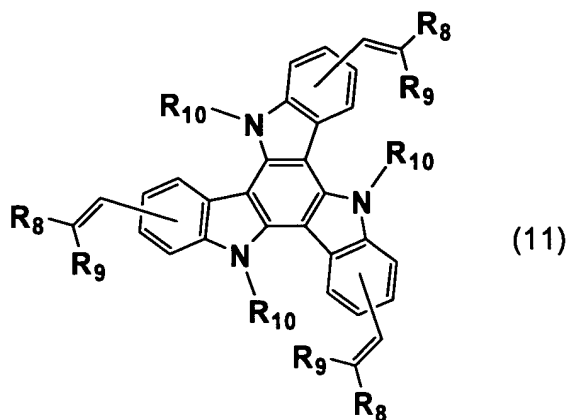
10 ~~{formula 15}~~



~~{wherein R<sub>8</sub> and R<sub>9</sub> have the same definitions as give above}~~.

8.~~{8}~~ (Currently amended) A Sym-triindole vinyl derivative represented by the following general formula (11):

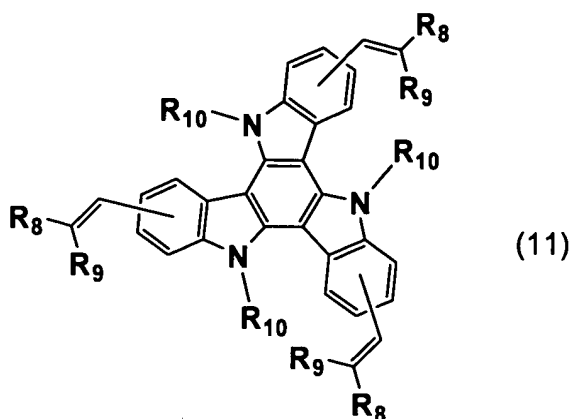
~~{formula 17}~~



~~wherein R<sub>8</sub> is hydrogen or cyano group; R<sub>9</sub> is cyano group, carboxylic acid group, C1-C6 alkoxy-carbonyl group, aryloxy-carbonyl group, aryl group or substituted aryl group; and R<sub>10</sub>~~  
5 ~~is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group~~.

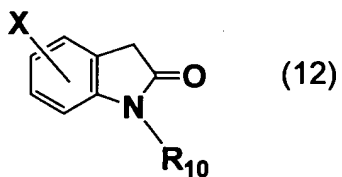
9.~~9~~ (Currently amended) A process for producing a Sym-triindole derivative represented by the following general formula (11):

10 ~~{formula 22}~~



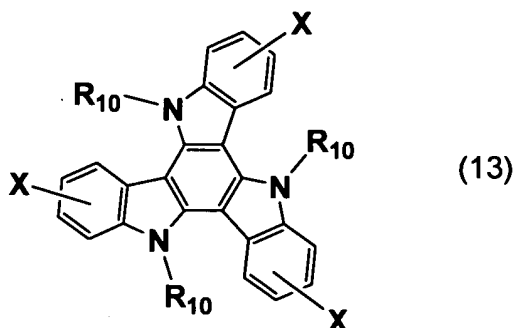
{wherein R<sub>8</sub> is hydrogen or cyano group; R<sub>9</sub> is cyano group, carboxylic acid group, C1-C6 alkoxycarbonyl group, aryloxy-carbonyl group, aryl group or substituted aryl group; and R<sub>10</sub> is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12  
 5 haloalkyl group or aryl C1-C6 alkyl group}, which process comprises reacting an oxyindole compound represented by the following general formula (12):

~~{formula 18}~~



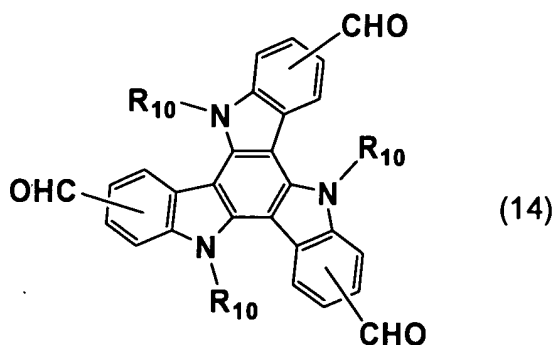
{wherein R<sub>10</sub> has the same definition as given above and X is  
 10 halogen}, with a phosphorus oxyhalide to obtain a Sym-halo-triindole derivative represented by the following general formula (13):

~~{formula 19}~~



{wherein  $R_{10}$  and X have the same definitions as given above},  
subjecting the derivative of general formula (13)~~it~~ to formyl-  
lation with a formylating agent in the presence of butyllith-  
5 ium to obtain a Sym-formyltriindole derivative represented by  
the following general formula (14):

~~{formula 20}~~



{wherein  $R_{10}$  has the same definition as given above}, and re-  
acting the derivative of general formula (14)~~it~~ with a me-  
10 thylene compound represented by the following general formula  
(9):

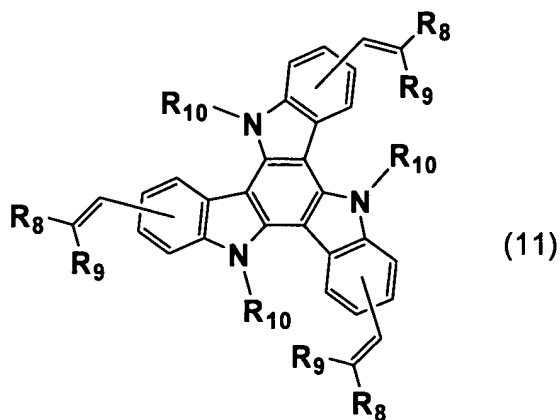
~~{formula 21}~~



(wherein R<sub>8</sub> and R<sub>9</sub> have the same definitions as given above).

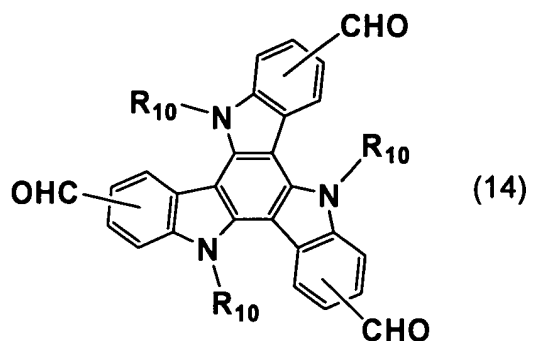
~~{10}~~10. (Currently amended) A process for producing a Sym-triindole derivative represented by the following general  
5 formula (11):

~~{formula 25}~~



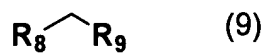
~~{wherein R<sub>8</sub> is hydrogen or cyano group; R<sub>9</sub> is cyano group, carboxylic acid group, C1-C6 alkoxy-carbonyl group, aryloxy-carbonyl group, aryl group or substituted aryl group; and R<sub>10</sub>~~  
10 is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group}, which process comprises reacting a Sym-formyltriindole derivative represented by the following general formula (14):

~~{formula 23}~~



~~{wherein R<sub>10</sub> has the same definition as given above}~~, with a methylene compound represented by the following general formula (9):

5 ~~{formula 24}~~

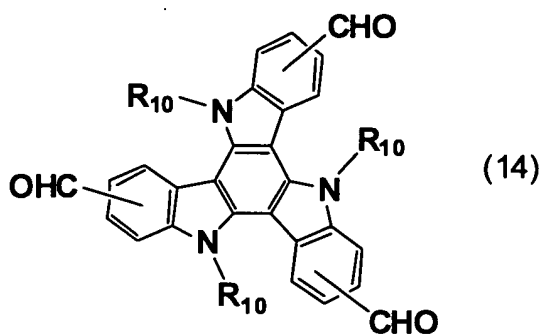


~~{wherein R<sub>8</sub> and R<sub>9</sub> have the same definitions as given above}~~.

11.~~{11}~~ (Currently amended) A process for producing a Sym-formyltriindole derivative represented by the following general formula (14):

10 ~~{formula 27}~~

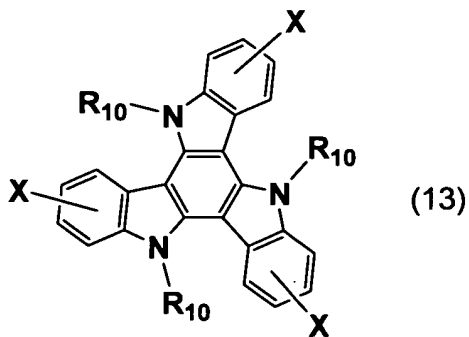




{wherein R<sub>10</sub> is C2-C12 alkyl group, substituted C2-C12 ~~sub-~~  
~~stituted~~ alkyl group, C2-C12 haloalkyl group or aryl C1-C6  
 alkyl group), which process comprises subjecting a Sym-halo-  
 triindole derivative represented by the following general

5 formula (13):

~~{formula 26}~~

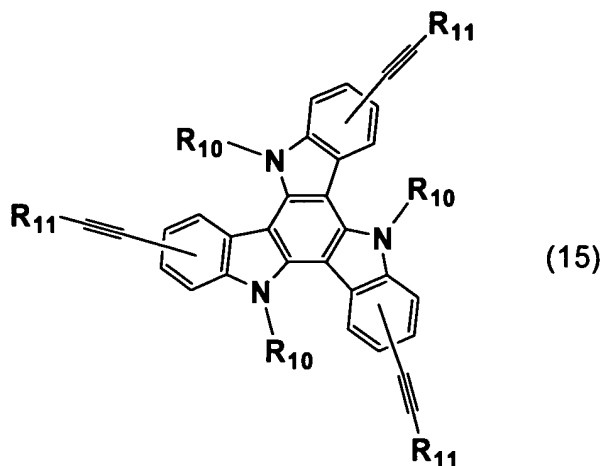


{wherein R<sub>10</sub> has the same definition as given above and X is  
 halogen}, to formylation with a formylating agent in the  
 presence of butyllithium.

10 12.~~{12}~~ (Currently amended) A Sym-triindole derivative  
 represented by the following

general formula (15):

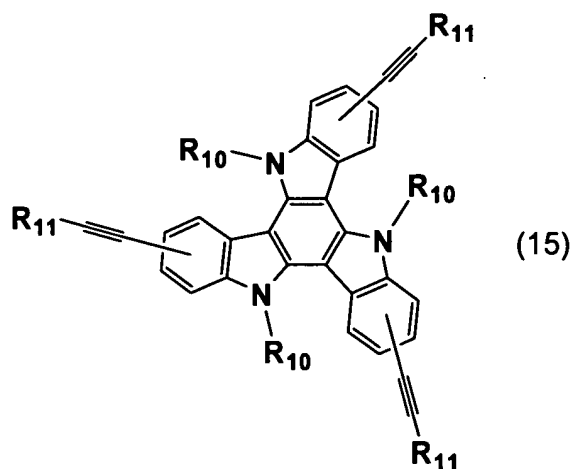
~~{formula 28}~~



~~{wherein R<sub>10</sub> is C2-C12 alkyl group, substituted C2-C12 sub-~~  
~~stituted-alkyl group, C2-C12 haloalkyl group or aryl C1-C6~~  
 5 ~~alkyl group; and R<sub>11</sub> is aryl group or substituted aryl group}~~.

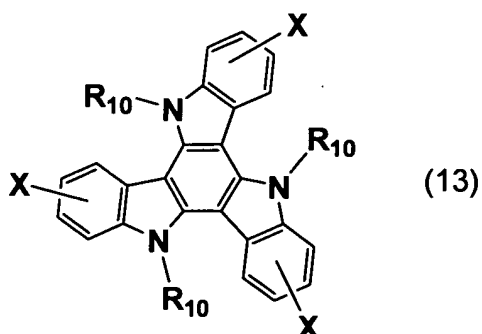
13.~~{13}~~ (Currently amended) A process for producing a  
 Sym-triindole derivative represented by the following general  
 formula (15):

~~{formula 31}~~



{wherein  $R_{10}$  is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and  $R_{11}$  is aryl group or substituted aryl group}, which process comprises reacting a Sym-halo-triindole derivative represented by the following general formula (13):

~~{formula 29}~~



{wherein  $R_{10}$  has the same definition as given above and X is halogen} with an acetylene derivative represented by the following general formula (16):

~~{formula 30}~~

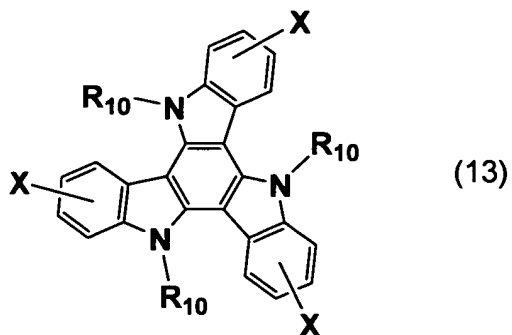


~~{wherein  $R_{11}$  has the same definition as given above and  $R_{12}$  is hydrogen or trimethylsilyl group}~~.

14.~~{14}~~ (Currently amended) A Sym-halo-triindole deriva-

5 tive represented by the following general formula (13):

~~{formula 32}~~



~~{wherein  $R_{10}$  is C2-C12 alkyl group, substituted C2-C12 alkyl group, C2-C12 haloalkyl group or aryl C1-C6 alkyl group; and X is halogen}~~.